

Disclosed is a method of avoiding a collision of a frame and enabling the guarantee of the QoS in a network using the CSMA/CD system, wherein when a terminal transmits a frame onto a transmission line, timing information as to the timing of transmitting a next frame is added to the frame. All the terminals in the same segment reserve the timing information in timing reservation management tables respectively, as the timing of transmitting a frame from other terminal, and prohibit the transmission of frames from their own terminals. In addition to that, each terminal reserves the timing of transmitting a next frame from its own terminal in a timing reservation management table, and when the timing comes, it transmits a next frame onto the transmission line.